

Revitalization of the Industrial Cooperative Based Learning in the Effort of Enhancing the Food Field Competence

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Abstract

The primary mission of vocational education is to prepare the workers, vocational education therefore requires a link between education and the workplace. line with developments in the field of workforce needs catering and tourism, human resources need to get special priority, with the ability to prepare the local workforce so as to apply the best standards that apply nationally and internationally.

It is unfortunate that the current food industry has not been used optimally by the organizers of education to train human resources capable of implementing the best standards, whereas cooperative-based learning with an industry solution to improve the competence of graduates. Many kinds of cooperative-based learning can be developed from classroom lecture, tour, entry level, work experience, on the job training and apprenticeship.

Accordingly, the cooperative-based learning in vocational education industry should be revitalized to operate in either variety, frequency, and quality. this is important because through industrial cooperative based learning learners will acquire the knowledge, skills, and attitudes that are useful for future career interests.

Key word: Cooperative based-learning, work competence

1. Introduction

The aim of the Educational activities mainly is to enhance human potential trough the integrated learning processes. The matter is reflected on the *Undang-undang Sistem Pendidikan Nasional (USPN)* No. 20 of the year 2003 mentioning that education is an attentive effort to develop an individual in order to be able to establish their self-potency trough the learning processes. With the learning processes it is expected that the students will possess the religious spiritual strength, self control, good personality, intelligence, good attitude, and the individual skill which will be valuable either for themselves, the society, or for the nation in general.

The statement reflects the development of human potency is greatly depends on the quality of the learning processes, which has been a special challenge for the theorist, the planner, and the executor in the educational field to be able to arrange and establish the national education system which is relevant with the society demand and the development of science.

The objective of the vocational education is to prepare an individual in order to have work capability in an occupation group or certain occupation. Thus, the vocational education in the food work field is responsible on preparing an individual to obtain the capability to work in the food work field. The jobs related to the food field for example are; Bakers, Chef and Head Cooks,

Food Service Managers, Cooks, Short Order, Cafeteria and Food Concession.

With the intention of making the education is able to achieve its objectives, the learning processes which is conducted has to have high relevance with the work field. One obvious way in actualizing the effort is by providing a stimulus for the students in the form of valuable learning experience which is expected would help the students to develop their self-potency and consequently will ease them to find a job in the work world.

The productivity enhancement will be positively influence the improvement of the society in general. Thus the learning processes in the vocational education has to be able to enhance the productivity. The learning has to focus it processes in developing the students comprehension in making a rational decision, developing interpersonal relationship and work capabilities with their fellows, and in developing the internalization of work-oriented values and attitude.

The general crisis in the vocational education is the unpreparedness of its graduates to face the competitive atmosphere in the work world because of the less competence that they had which mismatched with the demand of the work world. The existing fact shows that the qualification of 76 million Indonesian workers are included as unskilled workers, only 19 million workers have skills needed in their work field. The number of workers who have special skills and expertise are only 4,5 million workers. (Depdiknas, 2009).

Recently, the development of the field workers has been increasingly dynamic and therefore need a right anticipation. One of the anticipation effort provide by the education institutes is the enforcement of the industrial cooperative based learning. The rationalization is in the preparation of the students to move toward and developed in the work world not only to prepare the work skills such as career and technical education which are similar to the one in 90's era, however, the aspects in present is higher than its predecessor those are problem solving and collaborative work skills (Doolittle & Camp, 1999).

Actually the learning processes in the Indonesian vocational education since 1997 has produced the policy to operate the cooperative based learning with the industrial partnership in the form of industrial practice activities or the industrial field practice, as the realization of the link and match policy. The policy has been a kind of reformation effort in vocational education by inviting the business and industrial field to make a commitment in the planning, execution, and the evaluation of the vocational education practices.

Unfortunately the industrial cooperative based learning processes has not been optimally utilized by the education conductor. The food industries such as restaurant, bakery, catering might be used as an actual laboratory for the students and the well trained human resources and the adequate facilities might be beneficial to help the students to apply the best standard, either in regional or international coverage.

2. Revitalization of the Industrial Cooperative Based Learning Activities in Enhancing Food Field Competence

2.1 Food Field Competence

The definition of the word competence is a high importance for the vocational school. Competence means capability or ability. Competence is a knowledge, skill with the basic values reflected in the individuals' thinking habits and conduct (Depdiknas: 2002). Competence is the ability to behave, think, and conduct in a consistent manner as the manifestation of the knowledge, attitude and skills possessed by the students. Etymologically, Moore, Cheng & Dainty (2002: 314 – 316) suggest the difference between competence and competency. Competence refers to individual work field such as teacher, doctor and so on, while competency refers to the aspects of the work attitudes in support to the job performance.

Substantially, Garavan & McGuire (2001 : 144 – 154) explain that competence might be seen from two aspects namely the individual attribute and the learning outcome. As an individual

attribute, competence could be called as an individual's knowledge, skill and ability to deliver a good performance in the related job. From the aspect of learning outcome, competence defined as the individual performance which has met the specified standards. Competence considered as the individual attribute which has a flexible nature, therefore it is considered to be more appropriate to apply in the highly complex industrial works.

Wenrich and Wenrich (1974: 6) suggest that the competence related to the vocational education is the total process of education aimed at developing the competencies needed to function effectively in an occupation or group of occupation. The consistent and constant thinking habit and attitude will enable an individual to be more competent. According to Ella Yulaelawati (2004), competence is a bunch of knowledge, skill, attitude, and the values as the features influencing the individuals' role, conduct, performance, and work.

Competence might be enhanced through a training activities, education, and field work experiences. The aspects which might be classified as competence are knowledge, skill, value and attitude. According to Gardor which is quoted by Mulyasa (2002: 38-39), the contained aspect in the concept of competence are: 1) knowledge; is the awareness in the cognitive field. 2) understanding; is the depth of the cognitive and affective aspects belonging to an individual. 3) skill; is an aspects possessed by an individual in performing the tasks or jobs assigned to them. 4) value; is a behavior standard which is made a psychological belief and has been an integrated part of an individual. 5) attitude; feelings (exciting, unexciting, like and dislike) or reaction toward an external stimulus. 6) interest; an individual tendency to do something.

The industrial world needs high competent human resources, because the high competence human resources is considered to be a warranty for success in the effort of achieving the objective, most of the industrial organization use the competence as the basic standard in their employees recruitment, developing the standard competence even for the compensation offer. Thus the competence is highly important in the recruitment, training, and development processes to ensure that the employees ability is adequately meet the industry needs, which is at the end will produce an optimal performance.

In the educational context the work competence includes three aspects those are knowledge, skill, and attitude (Wenrich, 1974: 38). In order to identify the students' achieved competence as the result of the learning processes, the standard has to be equivalent with the desired focus of the vocational learning. It means that the

knowledge, skill and attitude are appropriate in the vocational field.

The food business, as the restaurant industry, consists of the tangible products such as food and beverage and the intangible products such as the service product, safety service, hospitality, and comfort.

The data resources obtained from the careeronestop site, on the O Net On Line shows that the responsibility of a chef is:

- Check the quality of raw and cooked food products to ensure that standards are met.
- Monitor sanitation practices to ensure that employees follow standards and regulation.
- Check the quantity and quality of received products.
- Order or requisition and order food supplies needed to ensure efficient operation.
- Supervise and coordinate activities of cook and workers engaged in food preparation.
- Inspect supplies, equipment, and work areas to ensure conformance to established standards in food displays.

- Determine how food should be presented, and create decorative food display.
- Instruct cooks and order workers in the preparation, cooking, garnishing, and presentation of food.
- Estimate amount and cost of required supplies, such as food and ingredients.
- Collaborate with other personnel to plan and develop recipes and menu, taking into account such seasonal availability of ingredients and the likely number of customers.

(<http://online.onetcenter.org/link/summary>, update 2008.)

Subsequently, the competence demand is explained in detail to make it clearly identified as follows:

Table 1. the Competence of Chef Cook According to the Industrial Demand.

No	Kompetensi	Sub Kompetensi
1	Tools & teknologi	<i>Commercial use cutlery, Commercial slicer, Commercial grater, Commercial range Domestic kitchen.</i>
		<i>Analytical software (food software, recipe & menu software, nutrition analysis software), Data base user interface and query software. Materials requirements planning logistic and supply chain software (F&B Control) and Office suite software.</i>
2	<i>Knowledge</i>	<i>Production dan Processing Administration and Management Customer and personal Service Food production Education and Training English language</i>
3.	<i>Skills</i>	<i>Time Management Negotiation Service Orientation Instructing Equipment Maintenance Monitoring Judgement and Decision Making Equipment Selection Management of Financial Resources Reading Comprehension</i>
4.	<i>Ability</i>	<i>Oral expression Oral Comprehension Problem sensitivity Information ordering Deductive reasoning, Inductive reasoning</i>

		<i>Near vision</i> <i>Arm-hand Steadlines</i> <i>Orginality</i> <i>Spech Clarity</i>
5.	Work Activity	<i>Thinking Creativity</i> <i>Making Decision and Solving problem</i> <i>Coordinating the work and activities of other</i> <i>Establishing and maintaining Interpersonal relationship</i> <i>Getting Information</i> <i>Inspecting equipment, structure or Material</i> <i>Resolving Conflicts. and negotiating with Orders</i> <i>Communicating with supervisor, peers, or subordinates.</i> <i>Identifying objec, action and events</i> <i>Monitoring and Controlling Resources</i>
6.	Work Context	<i>Spend time standing</i> <i>Freedom to make desision</i> <i>Importance of Being Exact or Accurate</i> <i>Structured versus unstructured work</i> <i>Responsibility for outcomes and Results</i> <i>Response for others Health and safety</i> <i>Work with work group or team</i> <i>Spend time making repetitive motion</i> <i>Contact with others</i> <i>Impact of desission on co- workers r Company Result-</i>
7.	Interest	<i>Enterprizing</i> <i>Realistic</i> <i>Artistic</i>
8.	Work Styles	<i>Dependability</i> <i>Stress Tolerance</i> <i>Leadership</i> <i>Self Control</i> <i>Attention to details</i> <i>Adaptability/flexibility</i> <i>Achievement/Effort</i> <i>Integrity</i> <i>Persistence</i>
9	Work Value	<i>Independence</i> <i>Recognition</i> <i>Achiement</i>

(Source : (<http://online.onetcenter.org/link/summary>.)

Based on the competence list, it is obvious that work world demanding high complexity of competence, one which is very difficult to achieve for the inexperienced graduates. Moreover, for the graduates of the school whose learning process still conventionally conducted, those competence demands would be very difficult to achieve by the students.

The data in table 1 provide a clear description that the cooks job demand a complex competence, not a limited skill in operating the production machine, but the comprehension of the work values itself. The result of the research conducted by Prihastuti and Komariah (2009) shows that generally the restaurants in Yogyakarta will accept an employee with the following priority of

competence 1) attitude, 2) appearance, 3) knowledge, 4) skill, and 5) wisdom. Attitude needed to make the graduates acceptable either for the company or the work colleagues, and able to interact with the customer in a good manner. Appearance is needed because the employee has to be able to reflect the company image, while the aspect of knowledge and skill called the productive competence needed to perform certain job. While the aspect of wisdom will closely related to the managerial skill which will be very important when an individual has been a part of a work world and having a certain level of occupation.

2.2 Revitalization of the Industrial Cooperative Based Learning Types

The industrial cooperative based learning actually conducted by developing the Work-Based Learning. The method and strategy in conducting the Work-Based Learning is highly vary. Cunningham, Dawes and Bennet (2004: 57 – 94) identify the strategy to conduct WBL and the development includes action learning, apprenticeship, career advice, continuing professional development, internship, mentoring,

networks and communities, qualifications, self managed learning and team development.

The variation of WBL starts from inviting a guest lecturers, conducting interviews, industrial tour, on the job training, and the competitive employment are the level of commitment in the work world toward the education institutions. Those level are describe as follows:

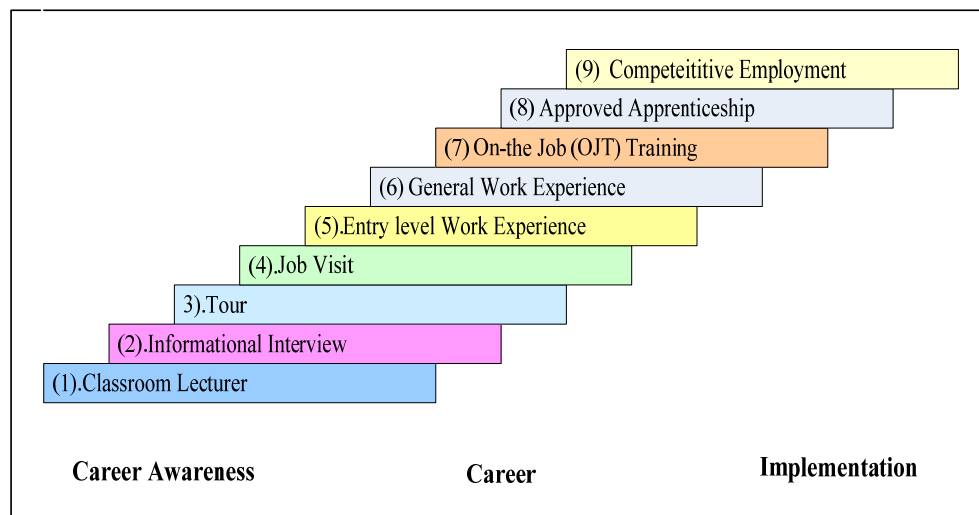


Figure 1. Continuum of Work Based Learning Experiences.(Resources : WBL Guide 2002:A-5)

The above stages shows the education level, and the achieving career level, those are from the stages: **1) career awareness; giving an awareness about career, 2) career exploration, 3) career implementation.** The higher the diagram, the higher the education level of the achiever.

The industrial cooperative learning processes develop the learning processes beyond the industrial learning standard. The form could be job shadowing, service learning, internship, and apprenticeship. The learning processes provide the structure of learning which meant a realization an participation in their learning experience.

Apprenticeship is also called freelance work program, that is the oldest education strategy, known as the “co-worker”. The freelancer is considered to be successful if they are able to acquire the expertise at the similar level with the instructor. Apprenticeship is a collaboration of academic program and learning objective trough a workplace learning. Apprenticeship designed with a longtime work. The apprenticeship program is directed to achieve some basic features which have to acquire those are the vocational qualification, the key skills according to the level of expertise, the certain elements in the specific jobs.

Job Shadowing: The Students observe the people in their job performance, thus would bring them to the organizational culture. Job shadowing usually done in one day work time, half day, or several day work time (Gray and Albrecht 1999, Betina 2003: 2).

Service Learning: Collaborating the students in the academic organization and practice. The activity is designed to fulfill their community needs. Service Learning give the trust to the students as the agents of change in the society. Service Learning give a simultaneous opportunity to develop the technical aspects, interpretative, and critical skills (Wagner, Childs, and Houlbrook 2001, dalam Betina 2003: 2).

Internship: is a school program, where the students learn about the jobs to the company or the workers in certain period of time. Sometime, they are paid but not rarely they are unpaid. It depends on the place where they conduct their study. The work experience is structured to reflect the work with the program base, where they become the part of the program. To achieve the best outcome, the internship experience has to be structured and integrated in a good way in the school curriculum, and as the culmination is the products or services provided by the students in the learning process.

Many kind of models obviously shows that the development of the industrial cooperative based learning could be realized through the integration of knowledge and experience with the objective is to expand the perspective of learning and the skill development, needed to achieve the best performance of the learning process in the workplace.

Depdiknas has adopted the form of Work-Based Learning trough the application of the learning Strategies of Resource Based Learning (RBL), Contextual Based Learning, Inquiry Training and the Experience Based Learning. Those learning have some similarities, that all of the learning concepts help the teacher to connect the teaching material with the real life facts. The learning concepts have the similarity those are, constructivism, inquiry, questioning, learning community, modeling, reflection, and authentic assessment. The form of the industrial based learning is expected to be able to direct the learning process toward the competence enforcement and also establish the students character in the form of 1) Work Habit; 2) Interpersonal Skill; 3) Career Planning. Work Habit, is a work attitude which recurring all the time and at the end is able to make the individual to work properly and become the habit of the individual work. The work habit focus on the work preparation, work systematic, work performance, manual reading, the use of work instrument and component, workplace arrangement, the implementation of the work safety, maintenance, and the improvement of the work efficiency. Interpersonal Skill with the focus on the time discipline, work responsibility, work skill, work dedication, work creativity, communication and cooperation. While Career Planning is the preparation for the students for a certain job. This stage will be a guidance for the students to define the type of education they have to choose, because education in the narrow meaning is the preparation toward the career and job stages. In the context of work, the attitude established during the educational process in the school will construct the students character.

3. Conclusion

The industrial cooperative based learning actually contain a high philosophy meaning, that is the development of the human resources having the future oriented vision, superiority, professional, and efficient. The industrial cooperative based learning realized in the form of job shadowing, service learning, internship, and apprenticeship which well conducted not only to give the work experience to the students, but also the meta-cognitive process to train the students make a proper decision according to the situation in the real work world.

The revitalization of the industrial cooperative based learning in the food education or the other field not only produce the graduates with a high qualification of expertise needed in the work world, but also possessing the most benefits, because the education institutions might use the industrial or the work place as the laboratory to train the students about the work standard needed.

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